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United States Patent [19]

Scheler et al.

[11] **Patent Number:** 6,000,732[45] **Date of Patent:** *Dec. 14, 1999[54] **ARRANGEMENT FOR LOCKING AND UNLOCKING A DOOR OF A CONTAINER**[75] **Inventors:** Werner Scheler; Karl Schubert;
Andreas Mages; Andreas Anton, all of
Jena, Germany[73] **Assignee:** Jenoptik AG, Jena, Germany[*] **Notice:** This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).[21] **Appl. No.:** 08/649,263[22] **Filed:** May 17, 1996[30] **Foreign Application Priority Data**

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[51] **Int. Cl.⁶** E05C 5/00[52] **U.S. Cl.** 292/68, 292/6[58] **Field of Search** 292/4-6, 57-59,
292/63, 66, 68, 156, 157, 256.5, DIG. 11,
71, 159; 220/245, 251, 323[56] **References Cited****U S PATENT DOCUMENTS**

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Primary Examiner—Flemming Saether*Assistant Examiner*—Gary Estremsky*Attorney, Agent, or Firm*—McAulay Nissen Goldberg Kiel & Hand, LLP[57] **ABSTRACT**

An arrangement for locking and unlocking a door of a container for increasing operating reliability when locking and unlocking in a simple manner and for ensuring an opening and closing of the transport container in automated operation. Particle generation is reduced at the same time. Locking elements within a door, which can move in and out, penetrate into recesses of the container to be closed when moved out along a curved path. The arrangement is particularly applicable in transport containers for wafer-shaped objects of larger diameter, in which removal and charging are effected individually in a plane parallel to the surface of the wafer-shaped object and whose container cover is removed and inserted laterally.

4 Claims, 4 Drawing Sheets